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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,511	12/04/2003	Gregory Breyta	ARC920030073US1	2373

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MINTZ, LEVIN, COHN, FERRIS, GLOVSKY AND POPEO, P.C
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EXAMINER

VALENROD, YEVGENY

ART UNIT PAPER NUMBER

1621

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,511

Applicant(s)

BREYTA ET AL.

Examiner

Yevgeny Valenrod

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-19, 22-26 and 28-33 is/are rejected.
- 7) ☒ Claim(s) 20, 21 and 27 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3-25-04</u> . | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Applicant's election without traverse of Group II (claims 7-33) in the reply filed on 9/28/06 is acknowledged.

Claim 1-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/28/06.

Claim Rejections - 35 USC § 112

Claims 13-18 and recite the limitation "R⁶ is selected from hydrogen" in the second line of the said claims. There is insufficient antecedent basis for this limitation in the claim. The independent claim 7 defines the carbonyl moiety utilized in the claimed method as "an asymmetrically substituted fluorinated ketone". If R⁶ is hydrogen, the carbonyl is an aldehyde, not a ketone. R⁶ being hydrogen in claims 13-18 therefore lacks antecedent basis.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claim 7-9 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Loh et al. (*Tetrahedron Letters* **1999**, 40, 9333-9336).

Loh et al. disclose a method that comprises contacting an asymmetric ketone with a substituted olefin to furnish an alkene fluoroalkanol (page 9333, scheme 1). More specifically an allyl bromide is reacted with phenyl-trifluoromethyl ketone (page 9334, table 1, entries 1-8) to furnish the corresponding addition product (page 9335, Scheme 2, top-left compound).

Claims 7, 13-18, 22 and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Urry et al. (*J. Org. Chem.* **1968** 33(6) 2302-2310).

On page 2306, column 1, reaction (13), Urry et al. describe a method of preparing an alkene fluoroalkanol by reacting an olefin with an asymmetric ketone. The olefin has a substituted methyl substituent and the ketone is fluorinated. The substitution of both olefin and carbonyl reagents meet the limitations of claims 7, 13-18, 22 and 28-33.

Claims 7-11, 13-19, 22-26 and 28-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Nagai et al. (*Chem. Pharm. Bull.* **1992**, 40(3), 593-598).

Nagai et al disclose a method of preparing an alkene fluoroalkanol by contacting trans-2-octene with trifluoromethyl-methyl ketone (page 593 bottom of column 2). They also disclose a method of preparing an alkene fluoroalkanol, where cyclohexene is contacted with a variety of unsymmetrical fluorinated ketones or a trifluoromethyl

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aldehyde (when R=H) (page 595, Table 1). The substitutions on the olefin and the carbonyl components of the described method meet the limitations of claims 7-11, 13-19, 22-26 and 28-33.

Claims objections

Claim 27, 20 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Allowable subject matter

Claims 27, 20 and 21 would be allowable if rewritten in independent format. Prior art search failed uncover syntheses of fluoroalkenols where the alkene component is as listed in claims 12 and 27 or the ketone component is as listed in claims 20 and 21. Although the method of preparing fluoroalkenols is known, the particular fluoroalkenols that would be the product of method claims 12, 27, 20 and 21 were not found in prior art search. One of ordinary skill in the art would have been motivated to adapt the known synthetic method to prepare the novel products.

Conclusion

Claims 1-33 are pending

Claims 1-6 are withdrawn from further consideration

Claims 7-19, 22-26 and 28-33 are rejected


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Claims 20, 21 and 27 objected to.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yevgeny Valenrod whose telephone number is 571-272-9049. The examiner can normally be reached on 8:30am-5:00pm M-F.

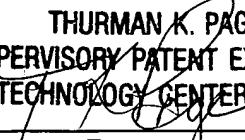
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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